Wireless

3550 Touch-Screen Radio Test System

The Complete Portable, On Site Radio Communication Test System for Analog and Digital Communication Systems

The 3550. The first truly portable touch-screen radio communication test system. The 3550 takes radio and repeater site testing to the next level with a quantum leap in an easy to use, integrated test system for complete radio receiver and transmitter performance testing, cable fault and antenna system analysis. With its ultra-responsive capacitive touch screen, the 3550 brings a whole new experience to RF testing.

- Next Generation Touch-Screen Operation!
- Define your own test screens and then save for future use!
- True Internal Battery Provides 4.5 Hours Portability on One Charge!
- Super Light Magnesium Alloy – 8.3 lbs/3.75 kg Weight! Almost half the weight of competitive units!
- 0 to 50 C Operating Range!
- 0.15ppm Timebase with Exclusive "Freq-Flex" External Flexible Frequency Reference!

Complete Support for Today's Analog and Digital Technology

- AM
- FM
- DMR (MOTOTRBO™)
- P25
- NXDN™
- dPMR
- ARIB T98

Advanced Cable and Antenna Test Functions

Distance to Fault

"Touch and Find" Markers

Return Loss Measurements

VSWR Analysis

Full Feature RF Test Functions

-140 dBm DANL Spectrum Analyzer

Tracking Generator for Duplexer Alignment

Multi-Function Oscilloscope

External "Freq-Flex" Frequency Reference

Multi-Language Support

Simplified Chinese

Traditional Chinese

Spanish

Portuguese

Malay/Indonesian

Korean

Arabic

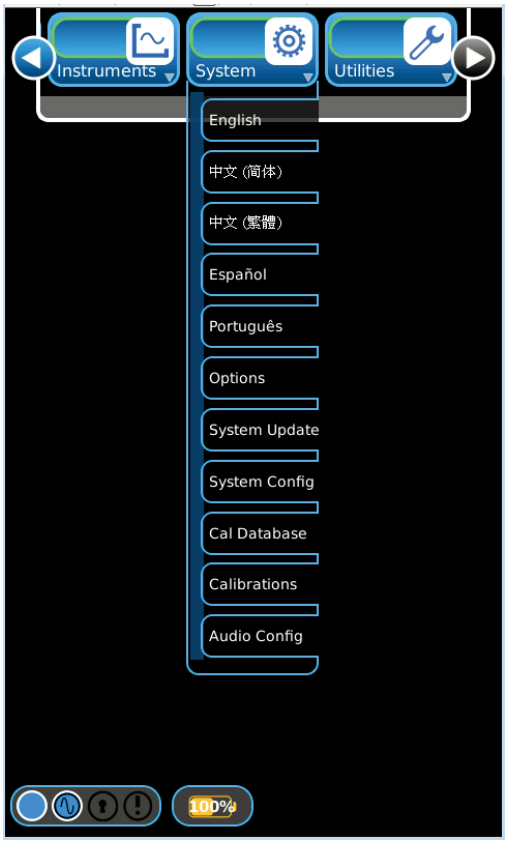
Polish

Russian

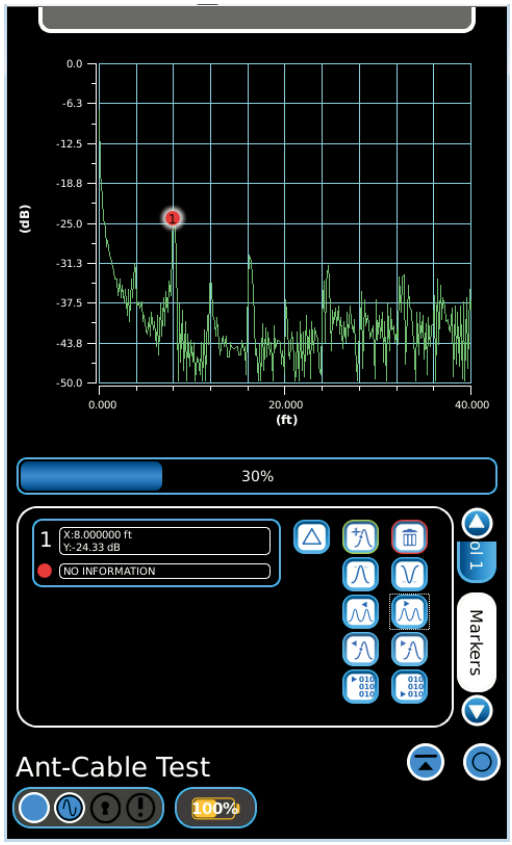
Japanese

German

French



The 3550 System Language Selection



The 3550 Distance To Fault Analysis

Aeroflex's expertise in developing radio communications test sets with exclusive features and excellent return on investment put the 3550 at the front of affordable, high performance RF analysis. Designed for speed, the 3550 features a complete radio test system with an advanced touch screen that simplifies cable and antenna testing.

Simplified Repeater Site Analysis and RF Installation Testing

Designed to meet a multitude of radio tests requirements, the 3550 provides fast, reliable measurements of the radio's transmitter and receiver parameters. Expanded capabilities allow users to perform quick testing of antennas and cables at the touch of a screen. The 3550 provides fast distance to fault, return loss and VSWR measurements with "Touch and Find" marker control for ease of use and accurate measurements.

Coupled with the most complete RF test functions available in a portable test solution, the 3550 allows you to quickly isolate transmitter and receiver problems and assess the complete performance of the radio communication system. The -140 dBm DANL FFT Spectrum Analyzer finds tough interference problems quickly, with exclusive "Touch and Find" markers. In addition, the full span tracking generator gives you the ability to re-tune your antenna duplexer quickly on site.

R for Ruggedized

The 3550R is a ruggedized version of the 3550 Radio Test Set. Featuring a resistive touch screen, the 3550R allows for responsive touch screen operation, even when you are wearing gloves. Perfect for cold weather applications, the 3550R also features a wider operating range of -20 C to +55 C and MILPRF28800F Class 2 specification for toughness required for extreme conditions.

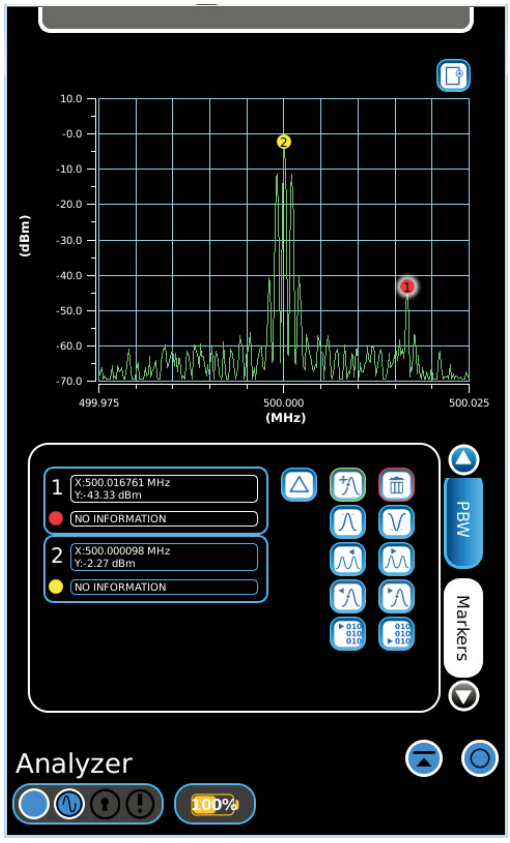
Complete RF Transmitter Testing

With integrated RF power, RSSI, frequency error and modulation meters, the 3550 provides complete analysis of AM, FM, P25, DMR (MOTOTRBO), dPMR, NXDN and ARIB T98 radio systems.

Aeroflex's exclusive "Freq-Flex" external frequency reference allows you to use any external reference from 2 MHz to 1 GHz to calibrate the 3550's time base. Simply connect a known good RF source to the 3550 antenna or T/R port and the 3550 timebase is frequency corrected to the reference signal for super-accurate RF frequency measurements. Once calibrated, the 3550 can then be taken out and used for hours "un-tethered" to the reference oscillator.

With typical power accuracy of 0.5 dB, and with external cable path loss correction, the 3550 provides superior power measurements for results you can count on.

FM deviation analysis with accuracies of 4% (typical) and 0.0 dB flatness provides deviation measurements you can trust for FM and digital technologies using FSK modulations. Flatness of the deviation meter is important when aligning radios to ensure proper digital operation.



The 3550 Spectrum Analyzer

Complete RF Receiver Testing

With a fully integrated, multifunction RF generator and SINAD, Distortion and BER meters, the 3550 allows for simplified and accurate receiver sensitivity testing. Full function audio routing allows the 3550 to perform proven Analog SINAD and DISTORTION testing down to -125 dBm. Plus, digital bit pattern sequences provide the digital RF generator needed to perform digital BER sensitivity testing for DMR (MOTOTRBO), dPMR, P25 and NXDN systems.

Meters Any Way You Want It

Exclusive, easy to read color coded meters allow for fast "Go, No-Go" testing at a glance. Plus, adjustable size at the touch of the screen provides more or less data as you require. It's so simple to set up and use! After you have the screen defined in a matter of seconds, you can easily save the screen settings and set-up parameters for use at a later time. You have 100's of setups for future use, plus if you need more than that, the easy access front USB drive port allows you to quickly recall stored set ups from your USB drive.

Complete analog test system

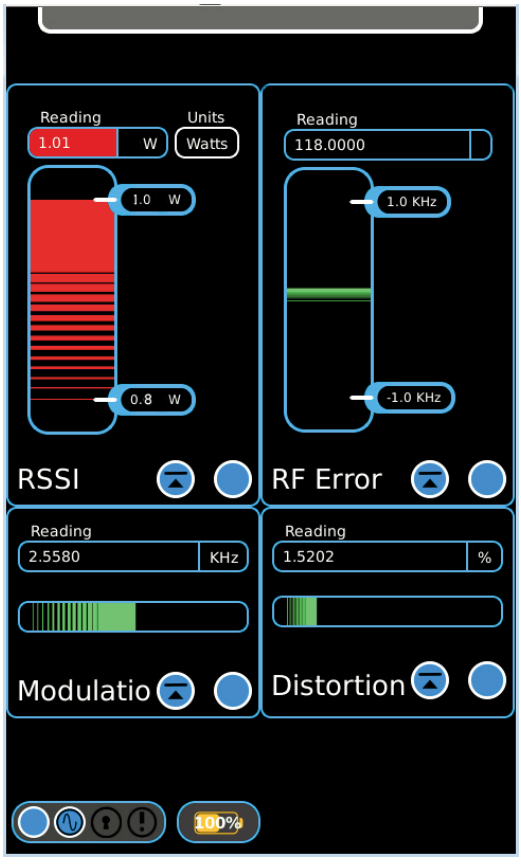
The 3550 includes the capability to perform direct connect type testing on a radio. All radio parameters including power, frequency error, modulation accuracy, receiver sensitivity and audio performance are easily accessed and tested.

To test receivers, the 3550 provides a signal generator, enabling the testing of the receiver portion of the radio. Audio SINAD, distortion and frequency are among the tests that the 3550 can perform on the radio's receiver. With two internal generators that can be used as modulation sources, the 3550 can modulate the carrier with both a test tone and a squelch tone.

Alternatively, the internal generators can generate both a test tone and DCS, enabling the testing of mobiles requiring a digitally coded squelch.

Direct Connect Testing

- RF power and frequency error
- AM modulation/FM deviation
- Audio frequency counter
- Receive Signal Strength Indicator (RSSI)
- CTCSS/DCS encode/decode
- DTMF encode/decode
- Distortion meter
- SINAD/sensitivity
- Spectrum analyzer
- Audio frequency oscilloscope
- Frequency find
- Audio level meter
- Pass/Fail limits



The 3550 Meter Formats

Snapshot and Clone Me!

The 3550 snapshot features allows you to capture the perfect picture of the system's performance before and after you're done! Spectrum shots, Distance to Fault, SWR and any other combination of meters and displays can be captured into digital picture for future reference.

If you've ever had to manage multiple instruments, you'll really appreciate our "Clone Me" function! If you have a fleet of test equipment that needs to do the exact same thing, and you have your 3550 defined exactly the way you want with screens and setups, the clone function allows you to transfer the same configuration to multiple 3550s through a simple internet connection.

Remote Operation and Remote File Access

Intermittent problems? If you've got internet access, then the 3550 has the perfect solution for you to remotely monitor tough to find system anomalies through your smartphone, tablet or PC anywhere on the planet. All you need is internet access and you have complete testing available at the click of a mouse, or a touch of your smartphone or tablet. VNC connection allows you to easily view a 3550 just like you were there. Found your problem and need to document it? Remote file access allows you to download pictures right from the 3550 to your local PC or device.

DIGITAL RADIO TEST OPTIONS

DMR Test

- Burst Power Meter
- Frequency Error Meter
- FSK Error Meter
- Symbol Deviation Meter
- Magnitude Error Meter
- Transmit BER Meter
- Color Code, Call ID, and Radio ID decode
- Transmit 1031 Hz, O.153, and calibration patterns
- Base Repeater pattern for duplex radio testing
- User programmable Color Code and Call ID

With the DMR option, the 3550 can now perform a complete test on the transmitter and receiver of a DMR radio. This testing includes the measurement of the key modulation fidelity parameters, FSK error, magnitude error, symbol deviation and frequency error. The 3550 can also measure the power during the burst and the power level between the bursts. In order to enable the testing of radios, without requiring them to be put into a special test mode, the 3550 also has a programmable color code and call ID. A key feature of the 3550 is the base repeater (BR) pattern. A radio in duplex mode must synchronize with this BR pattern before it can transmit. It would not be possible to test a duplex radio without this feature.

P25 Test

- Modulation Fidelity, Deviation, and Frequency Error Meters
- Transmit BER Meter
- Signal Power Meter
- Transmit standard 1011 Hz, O.153, and calibration patterns

The 3550 P25 option gives you the capability to test P25 mobiles, hand-helds, repeaters and base stations. With this option, you can measure modulation fidelity, deviation and frequency error and transmit standard patterns as specified by TIA-102.CAAA-C. This function becomes part of the Generator or Receive testing functions when this option is installed.

NXDN Test

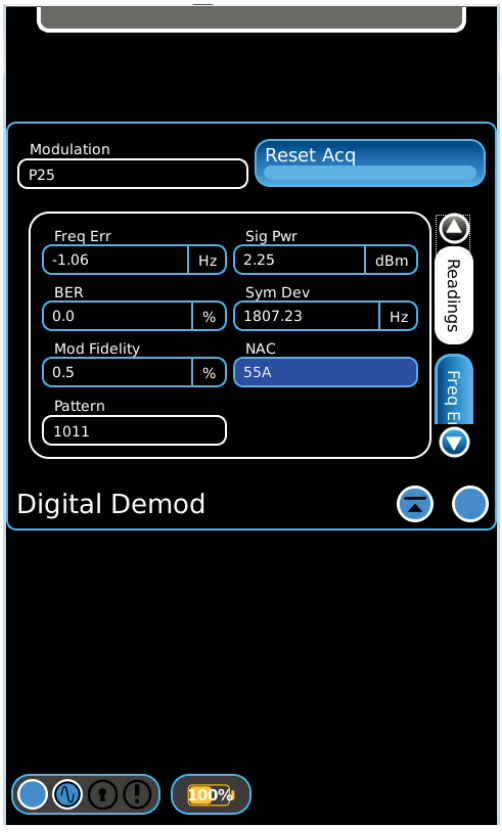
- Signal Power Meter
- Frequency Error Meter
- FSK Error Meter
- Symbol Deviation Meter
- Transmit BER Meter
- RAN Decode
- Transmit 1031 Hz, O.153, and calibration patterns
- User programmable RAN for transmit

With the NXDN test option you will be able to measure the key NXDN RF parameters with the 3550. These measurements verify the correct operation of both the transmitter and receiver of a NXDN radio. The 1031 Hz pattern along with the selectable RAN enables a test of the audio of a NXDN radio without requiring it to be in test mode. With the O.153 random data pattern, you can perform

BER testing of the receiver to verify that it meets its sensitivity requirements.

dPMR Test

- Signal Power Meter
- Frequency Error Meter
- FSK Error Meter
- Symbol Deviation Meter
- Transmit BER Meter
- Transmit O.153 patterns



The 3550 Digital Analysis Panel

With the dPMR test option, you will be able to measure the key dPMR RF parameters with the 3550. These measurements verify the correct operation of both the transmitter and receiver of a dPMR radio. With the O.153 random data pattern, you can perform BER testing of the receiver to verify that it meets its sensitivity requirements.

SPECIFICATION

RF SIGNAL GENERATOR

FREQUENCY

Range

2 MHz to 1 GHz (Useable from 500 kHz)

Resolution

1 Hz

OUTPUT LEVEL

Range

T/R port: -50 to -125 dBm/707.11 µV to 0.13 µV

ANT port: -30 to -90 dBm/7071.07 µV to 7.07 µV

SWR port: -5 to -65 dBm/125743.3 µV to 125.7 µV

Resolution

Display 0.1 dB/0.01 µV

Step size 0.1 dB/0.01µV

Accuracy

±2 dB; ± 1.5 dB Typical

±3 dB (<-100 dBm); ±1.5 dB Typical

SSB PHASE NOISE

-80 dBc/Hz @ 20 kHz offset

-95 dBc/Hz at 1 GHz Typical @ 20 kHz offset

SPURIOUS

Harmonics

-30 dBc, -42 dBc Typical

Non-Harmonics

-40 dBc, -50 dBc Typical

RESIDUAL FM

<40 Hz in 300 Hz to 3 kHz BW; 16 Hz Typical

RESIDUAL AM

<5% in 300 Hz to 3 kHz BW; 0.65% Typical

PORT INPUT PROTECTION

ANT port: +20 dBm

SWR port: +20 dBm

T/R port: +44 dBm

PORT VSWR

ANT port: <1.5:1

SWR port: <1.5:1

T/R port: <1.25:1

FM DEVIATION (GEN 1 AND GEN 2)

Modulation Frequency Rate

Range

0.0 Hz to 20.0 kHz

Resolution

0.1 Hz

Accuracy

Timebase ±2 Hz

FM Modulation

Range

Off, 0 Hz to 100 kHz

Resolution

0.01 Hz

Accuracy

±10% (2 kHz to 50 kHz deviation, 150 Hz to 3 kHz rate)

Typically <4% (5.6 kHz deviation, 1 kHz rate)

Total Harmonic Distortion

3%, 1% typical (1 kHz rate, >2 kHz deviation, 300 Hz - 3 kHz BP filter)

EXTERNAL FM

MIC IN

Input Range

Range 1: 2–15 mVrms (8 mVrms nominal) MIC E-OPEN, F-GND

Range 2: 35-350 mVrms(100 mVrms nominal) MIC E-GND, F-OPEN

Range 3: 2-32 mVrms (20 mVrms nominal) MIC E-OPEN, F-OPEN

Frequency Range

300 Hz to 3 KHz

Deviation Range

Off, 0 Hz to 80 kHz

Modulation Accuracy

±20% (300 Hz to 1.2 kHz)

±30% (>1.2 kHz)

Slope

Positive voltage yields positive deviation

AUDIO IN

Switchable Loads

150 ohms, 600 ohms, 1 K ohms, DIV 10, High Z

Input Levels

0.05 to 3 Vrms

Frequency Range

300 Hz to 5 kHz

Level Sensitivity

1 kHz/35 mVrms

Slope

Positive voltage yields positive deviation

AM MODULATION (GEN 1 AND GEN 2)

Modulation Frequency Rate

Range

30 Hz to 5 kHz (operational from 10.0 Hz to 20.0 KHz)

Resolution

0.1 Hz

Accuracy

Timebase ±2 Hz

AM Modulation

Range

OFF, 0 to 100%

Resolution

0.1%

Modulation Accuracy

10% off setting, 150 Hz to 5 kHz rate, 10% to 90% modulation

Total Harmonic Distortion

3% (20% to 90% mod, 1 kHz rate, 300 Hz to 3 kHz BP filter)

EXTERNAL AM

MIC IN

Input Range

Range 1: 2–15 mVrms (8 mVrms nominal) MIC E-OPEN, F-GND

Range 2: 35-350 mVrms (100 mVrms nominal) MIC E-GND, F-OPEN

Range 3: 2-32 mVrms (20 mVrms nominal) MIC E-OPEN, F-OPEN

Frequency Range

300 Hz to 3 KHz

Modulation Range

0% to 80%

AUDIO IN

Switchable Loads

150 ohm, 600 ohms, 1 K ohms, DIV 10, High Z

Input Levels

0.05 to 3 Vrms

Frequency Range

300 Hz to 5 kHz

Level Sensitivity

1%/35 mVrms nominal

AFGEN 1 AND AFGEN 2

FREQUENCY

Range

30 Hz to 5 kHz (spec)

0.0 Hz to 20.0 kHz (usable)

Resolution

0.1 Hz

Accuracy

Timebase ±2 Hz

OUTPUT LEVEL

Range

0 to 1.57 Vrms (into 600 Ω)

Resolution

0.01 Vrms

Accuracy

±10%; Typical 3%

Distortion

3% (1 kHz rate, sine, 300 Hz to 3 kHz); 1% Typical

RF RECEIVER

FREQUENCY

Range

2 MHz to 1 GHz (useable from 750 kHz)

Resolution

1 Hz

Accuracy

Same as timebase

INPUT AMPLITUDE

Minimum Input Level, Audio Sensitivity

ANT: -80 dBm (22.4 µV), typical 10 dB SINAD (-110 dBm with preamp)

T/R: -40 dBm (2236 µV), typical, 10 dB SINAD

Usable Input Level Range

ANT: -60 dBm (-80 dBm with RF Amp On) to -10 dBm (RF Error, Distortion, Modulation, AF Counter and AF Level)

ANT: -90 dBm (-110 dBm with RF Amp On) to -10 dBm (RSSI)

T/R: -20 dBm to maximum input level (RF error, Distortion, Modulation, AF Counter and AF Level)

T/R: -50 dBm to maximum input level (RSSI)

Maximum Input Level

ANT: +20 dBm/0.1 W for 10 seconds

T/R: +43 dBm/20 W (FM) and +37 dBm (AM)

+47 dBm/50 W (FM) and +41 dBm (AM) with 50 W attenuator

+51.76 dBm/150 W (FM) and 45.76 dBm (AM) with 150 W attenuator

AM/FM DEMODULATION

IF Bandwidth

FM: 5 kHz, 6.25 kHz, 8.33 kHz, 10 kHz, 12.5 kHz, 25 kHz, 30 kHz, 100 kHz, 300 kHz

AM: 5 kHz, 6.25 kHz, 8.33 kHz, 10 kHz, 12.5 kHz, 25 kHz, 30 kHz

Audio Filters Bandwidth

0.3-20 k BP, 0.3-5 kBP, 0.3-3 kBP, 0.3 kHP, CCITT BP, C-Wt BP, 15 K LP, 5 K, LP, 3 K LP, 0.3 K LP

Audio Output Level Sensitivity

FM: (3 Vrms/kHz Dev)/IF BW (kHz) ±15%

AM: 7 mVrms/% AM ±15%

SPEAKER OUTPUT

75 dBa min. at 0.5 m, 600 - 1800 Hz, max volume

VOLUME CONTROL

Range

0 to 100

LO EMISSIONS

>-50 dBc

RF FREQUENCY ERROR METER

Range

±200 kHz

Resolution

1 Hz

Accuracy

Same as timebase ±2 Hz

RSSI INDICATOR (RF POWER WITHIN RECEIVER IF BAND-WIDTH)

Display Range

dBm: -120 dBm to +43 dBm (+53 dBm with Ext Attn dB set to 20 dB)

Watts: 10 pW to 20 W (200 W with Ext Attn dB set to 20 dB)

Usable Meter Reading RF Level Range

T/R port: -50 dBm to +43 dBm

ANT port (without RF amp on): -90 dBm to -10 dBm

ANT port (with RF amp on): -110 dBm to -10 dBm

Resolution

0.01 dBm

Accuracy

±3 dB; 1.5dB Typical (>-50 dBm into T/R, >-90 dBm into ANT or >-120 dBm into ANT with RF Amp On)

RF POWER METER (BROADBAND RF POWER INTO T/R PORT)

Display Range

0 to 43 dBm (0 to 20 W)

Minimum Input Level

0.10 W/+20 dBm

Maximum Input Level

20 W/43 dBm for 10 minutes at +25° C or until thermal alarm sounds

Resolution

0.01 W/0.1 dBm

Accuracy

±1 dB; 0.5 dB Typical

FM DEVIATION METER

Range

500 Hz to ±100 kHz

Modes

Peak+, Peak-, (Peak+ - Peak-)/2

Resolution

1 Hz

Accuracy

±10%, 6% Typical; of reading 500 Hz to 100 kHz Deviation

±5%, 4% Typical 1 kHz to 10 kHz Deviation, 150 Hz and 1 kHz rate

AM PERCENT METER

Range

5% to 100%

Modes

Peak+, Peak-, (Peak+ - Peak-)/2

Resolution

1%

Accuracy

±5% of reading, 1 kHz rate, 30% to 90% modulation, 3 kHz LPF; 2% Typical

ANT-CABLE TEST

Frequency Range

2.0 MHz to 1000.0 MHz

Span Range

10.0 MHz to 998 MHz

Start Range

2.0 MHz to 990.0 MHz

Stop Range

12.0 MHz to 1000.0 MHz

Frequency Resolution

0.1 MHz

Markers

2

Immunity to Interfering Signal

Typically -30 dBm

SWR MEASUREMENT

VSWR Range

1.00 to 20.00

Resolution

0.02

VSWR Accuracy

±10% of SWR readings (calibrated) <300 MHz

±20% of SWR readings (calibrated) ≥300 MHz

RETURN LOSS (RL) MEASUREMENT

Range

0.0 to -50.0 dB

Resolution

0.01 dB

CABLE LOSS MEASUREMENT

Range

0.0 to -50.0 dB

Resolution

0.01 dB

DTF MEASUREMENT

Measurement Range

3 ft to 328 ft

1 m to 100 m

Return Loss Range

0.0 to -50.0 dB

Cable types

USER, RG-8x, RG-8, RG-8foam, RG-8A, RG-55, RG-55A, RG-55B, RG-58, RG-58foam, RG-58A, RG-58B, RG-58C, RG-174, RG-213, RG-214, RG-223, RG-400

Velocity

0.00 to 1.00, automatically selected by cable type

Loss

0.00 to 100.00 dB per 100 ft, automatically selected by cable type

Est. Length

40, 80, 200 or 400 ft

12.2, 24.4, 61 or 121.9 m

AUDIO METERS

AUDIO INPUT (AUDIO IN)

Source

BNC Input on front panel

Frequency Range

300 Hz to 10 kHz

Level Range

0.2 Vp-p to 5 Vp-p

SINAD METER (WITH 1 KHZ AUDIO)

Measurement Sources

Audio in, demod

Audio Frequency

1 kHz

Display Range

0 to 40 dB

Resolution

0.1 dB

Accuracy

±1.5 dB from 8 to 40 dB; ±1.0 dB Typical

DISTORTION METER

Measurement Sources

Audio in, demod

Audio Frequency

1 kHz

Reading Range

0% to 100%

Resolution

0.1%

Accuracy

±10% from 1% to 20%

AUDIO FREQUENCY COUNTER

Range Demod

FM

15 Hz to 20 kHz (IF BW set appropriately for received modulation BW)

AM

100 Hz to 10 kHz (IF BW set appropriately for received modulation BW)

Range Audio Input

15 Hz to 20 kHz

Audio Input Level

10 mV p-p to 5 V p-p

Resolution

0.1 Hz

Accuracy

± 1 Hz

AUDIO FREQUENCY LEVEL METER

Measurement Sources

Audio in, DVM

Frequency Range

200 Hz to <5 kHz

Input Level

Audio in 10 mV rms to 3 V rms (x1)

1 V rms to 30 V rms (÷10)

DVM 10 mV rms to 3 V rms (x1)

1 V rms to 30 V rms (÷20)

Display Unit Resolution

Volts 0.001 V

mV 0.001 mV

dBuV 0.001 dBuV

dBm 0.001 dBm

Watts 0.001 W

Accuracy

±5%; ±2% Typical; Audio In

SPECTRUM ANALYZER

FREQUENCY

Range

2 MHz to 1 GHz

Resolution

1 Hz

Accuracy

Same as timebase

Span

10 kHz to 5 MHz in 1, 2, 5 sequence

EFFECTIVE RBW

Range

19 Hz to 25 kHz (Effective RBW calculated based on FFT window type and Span)

POWER BANDWIDTH

Offset Range

0 to ±2.495 MHz

Bandwidth Range

1 kHz to 5 MHz in a 1, 2, 5 sequence (maximum bandwidth is the selected span)

Power Bandwidth Display Range

-137 dBm to +43 dBm

Power Bandwidth Display Resolution

0.001 dBm

Power Bandwidth Accuracy

±3 dB (>-50 dBm into T/R, > -90 dBm into ANT or > -110 dBm into ANT with RF Amp On)

Displayed Average Noise Level (DANL)

-120 dBm (Typical, 10 kHz span) -140 dBm with pre-amp enabled

OSCILLOSCOPE (OPTIONAL)

Source

DVM, Audio In, Demod

Traces

One

Markers

Two

Trigger Type

Auto, Norm

Edge

Rising, Falling

Level

-100 to +100 V

Horizontal Range

0.5 ms/div to 0.1 sec/div

Accuracy

3% of full scale

Vertical

Range

FM demod

0.1 kHz to 50 kHz/div in a 1, 2, 5 sequence

AM demod

5, 10, 20, 50%/div

DVM and Audio in

10 mV to 10 V/div in a 1, 2, 5 sequence

Accuracy

10% of full scale

Coupling:

DVM Input: AC, DC and GND

Audio in: AC

Input Impedance

DVM Input: 1 MΩ

Audio in:150 Ω, 600 Ω, 1 KΩ, High Z , Div by 10

Bandwidth

5 kHz

TIMEBASE

Temperature Stability

±0.15 ppm at 25 C

Aging

1 ppm/year standard

Warm-up time

3 min.

ENVIRONMENTAL/PHYSICAL

Overall Dimensions

231 mm x 285 mm x 70 mm (W x L x D)

9.1 in. x 11.2 in. x 2.8 in.

Weight

8.3 lbs. (3.75 kg); 12 lbs. (5.4 kg) with accessories

Temperature

Storage: -51°C to +71°C storage

Note: Battery must not be subjected to temperatures below -20° C, nor above +60° C

Operation:

3550 - DC only Operation: 0°C to +50°C (battery removed, contingent upon applied RF power over time[2]).

3550R - DC only Operation: -20°C to +55°C (battery removed, contingent upon applied RF power over time[2]).

3550 Battery Operation: 0°C to +40°C (typical based on internal temperature rise and usage of the instrument[2])

3550R Battery Operation: -20°C to +40°C (typical based on internal temperature rise and usage of the instrument[2])

Note: Battery to be charged at temperatures between 0°C and +45°C

Altitude

4600 M - MIL-PRF-28800F Class 2

Humidity

95% Maximum (Non-condensing) MIL-PRF-28800F Class 2

Shock, Functional

30 G - MIL-PRF-28800F Class 2

Bench Handling

3550 - MIL-PRF-28800F Class 2

3550R - MIL-PRF-28800F Class 2

Vibration

3550 - (MIL-PRF-28800F Class 3)

3550R - (MIL-PRF-28800F Class 2)

COMPLIANCE

EMC

Emissions

MIL-PRF 28800F

EN61326: 1998 class A

EN61000-3-2

EN61000-3-3

Immunity

Mil-PRF-28800F

EN61326: 1998

SAFETY

Standard

UL 61010-1; CSA

ENVIRONMENTAL

Salt Exposure

3550R - MIL-PRF-28800F Class 2

Acoustic Noise

3550 - MIL-PRF-28800F Class 2

3550R - MIL-PRF-28800F Class 2

Explosive Atmosphere

3550 - MIL-PRF-28800F Class 2

3550R - MIL-PRF-28800F Class 2

Dust Resistance

3550 - MIL-PRF-28800F Class 2

3550R - MIL-PRF-28800F Class 2

Drip Proof

3550R - MIL-PRF-28800F Class 2

Blowing Rain

3550R - MIL-PRF-28800F Class 2

Solar Radiation

3550R - MIL-PRF-28800F Class 2

AC INPUT POWER (AC TO DC CONVERTER/CHARGER UNIT)

AC Input Voltage Range

100 to 240 VAC, 1.5 A max., 47 Hz - 63 Hz

Operating Temperature

0 C to +40 C

Storage Temperature

-20 C to + 85 C

EMI

EN55022 class B, EN61000-3-2 Class D

Safety

UL 1950, CSA 22.2 No. 234 and No.950, IEC 950/EN 60950

DC INPUT POWER

DC Input Voltage Range (DC INPUT CONNECTOR)

11 VDC to 32 VDC

DC Power Input, Max. (DC INPUT CONNECTOR)

55 W

DC Power Input, Nominal (DC INPUT CONNECTOR)

25 W

DC Fuse Requirement (DC INPUT CONNECTOR)

5A, 32VDC, Type F

BATTERY

Battery Type

Lithium Ion (Li Ion) battery pack

Note: Battery must not be subjected to temperatures below -20 C, nor above +60 C

Battery Operation Time

4.5 hours continuous use with 40% backlight, duty cycle 80% transmitter and 20% Receiver tests.

Battery Charge Time

4 hours

Note: Battery to be charged at temperatures between +0 C and +45 C only

VERSIONS AND ACCESSORIES

Versions

3550	Touch-Screen Radio Test System
3550R	Touch-Screen Radio Test System - Ruggedized

3550 STANDARD ACCESSORIES

External DC Power Supply

Getting Started Manual (Paper)

Operation/ICW Manual (CD)

REGIONAL KITS FOR 3550

90603	US
90890	China
90889	International

REGIONAL KIT ACCESSORIES

Hard, Pelican Transit Case

Power Cable (AC)

Short-Open-Load VSWR Calibrator

Cable (TNC) (M-M) (48 in)

2 X Cable (BNC) (M-M) (48 in)

5 X Adapter (BNC-F to TNC-M)

2 X Fuse, Spare (5 A, 32 VDC, Type F)

Case, Accessory

Power Cable (DC supply - cigarette lighter)

Getting Started Manual (Paper)

Operation/ICW Manual (CD)

Antenna (BNC) (50 MHz)

Antenna (BNC) (150 MHz)

Antenna (BNC) (450 MHz)

Antenna (BNC) (800 MHz)

Aeroflex Combo Stand and Cover

OPTIONS

35XX0PT01	Spectrum Analyzer
35XX0PT02	Oscilloscope
35XXOPT07	P25 Test
35XXOPT08	Tracking Generator
35XXOPT09	dPMR Test
35XXOPT33	NXDN Test
35XXOPT34	DMR Test
91895	Antenna, Cable, DTF Test Option
91832	Calibration Certificate - 3550

OPTIONAL ACCESSORIES

63927	Site Survey Software
89908	Mounting Bracket for AC27003 150W Attenuator
91679	Aeroflex Combo Stand and Cover
10192	Case, Soft-Sided Carrying
AC27002	Attenuator (20 dB/50 W), Adapter (N-F to BNC-F), Adapter (N-M to TNC-M)
AC27003	Attenuator (20 dB/150 W), Adapter (N-F to BNC-F), Adapter (N-M to BNC-F)
AC27005	Battery, Spare
AC0826	Tripod
AC24006	Tripod, Dolly, Stand

Extended Standard Warranties for 3550

W3500/203	Extended Standard Warranty 36 Months
W3500/205	Extended Standard Warranty 60 Months

Extended Standard Warranties with Calibration for 3550

W3500/203C	Extended Standard Warranty 36 Months with Scheduled Calibration
W3500/205C	Extended Standard Warranty 60 Months with Scheduled Calibration

[1] – "Specifications" describe product performance over the specified operating temperature range and frequency range are covered by the product warranty. "Typical" numbers are specified at ambient room temperature (23 C) and describes a characteristic that 95% of product exhibit (±2 standard deviations) with a 95% confidence level at room temperature (23°C). Typical characteristics are not covered by product warranty.

[2] – Use reason when working with RF test instruments. All thermal ratings are dependent upon applied RF power. The 3550 will alarm once the internal temperature of the 3550 exceeds predetermined limits. Applying power continuously in high ambient temperature conditions will result in a heat build-up within any instrument. The 3550 is rated for 20 W (43 dBm) for 10 minutes at +25° C or until thermal alarm sounds. Exceeding these conditions will result in thermal shutdown.

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AEROFLEX
A passion for performance.

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Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.

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